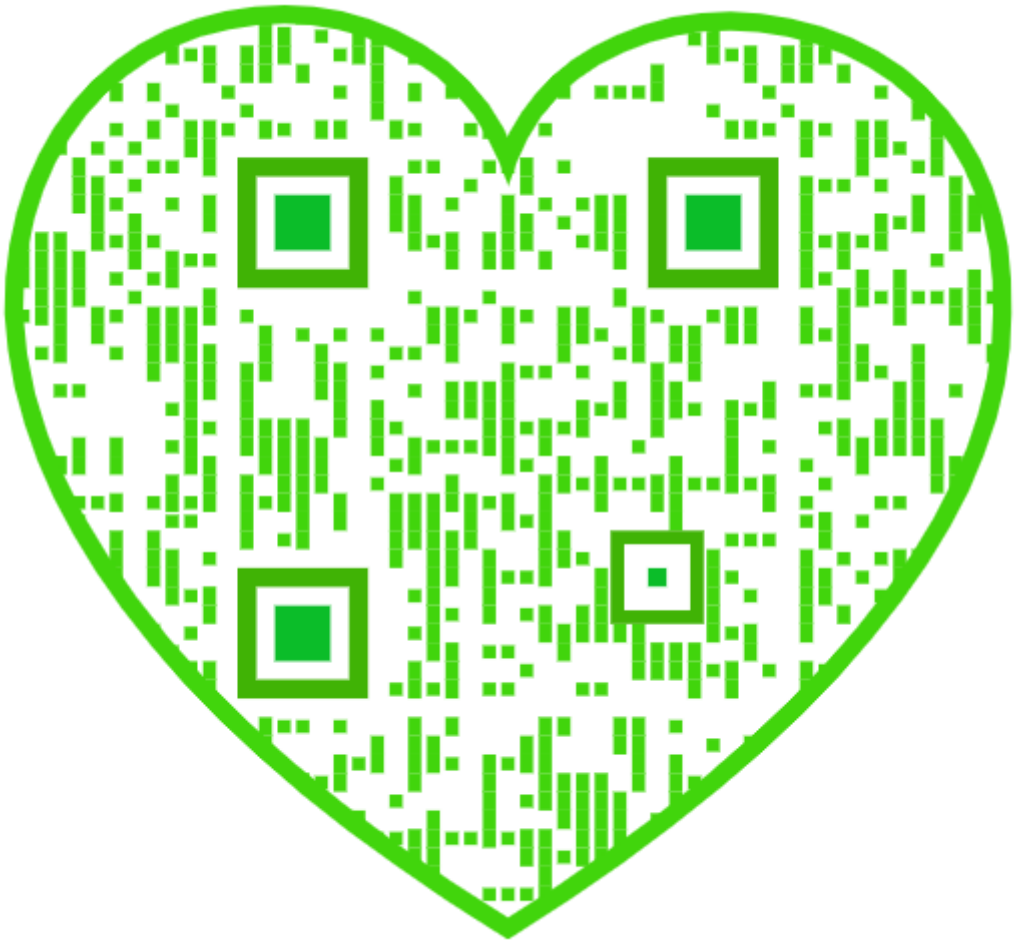

2, No. 23. Monthly. JULY, 1894. $1.20 per Year. Price, 10 Cents.

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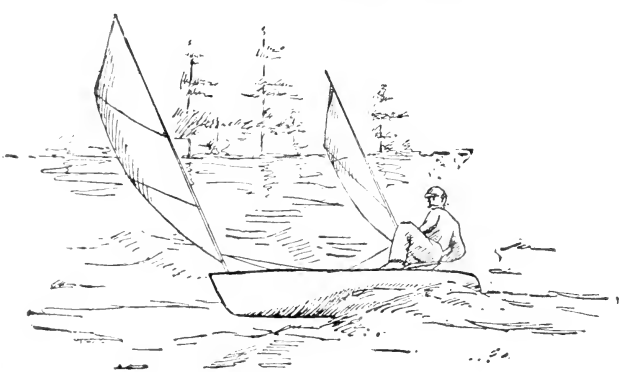
CANOEING

BY

C. BOWYER VAUX



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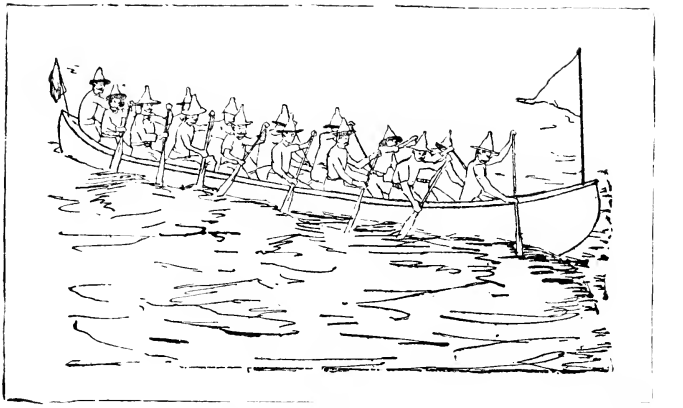
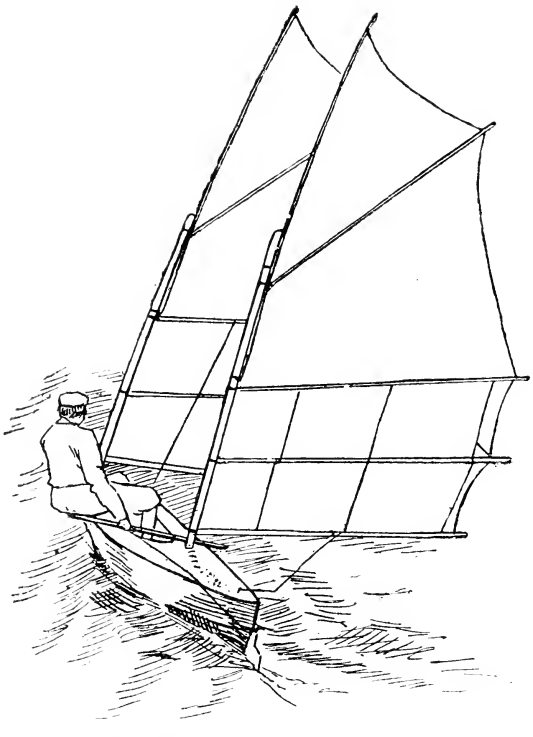


War Canoe, Toronto Club.
30 feet by 5 feet, holds 20, 16 paddlers.



Paul Butler, of Lowell, Mass. Canoe "Wasp," winner of American Canoe Association Sailing Trophy, 1892 and 1893. Hoisting Sails, Deck Seat and Thwartship Tiller.

CANOES

AND

CANOEING.

BY

C. BOWYER VAUX.

PADDLING, SAILING, CRUISING AND RACING CANOES, AND THEIR USES, WITH HINTS ON RIG AND MANAGEMENT, ETC.

THE SPORT IS PURELY AMATEUR.

FULLY ILLUSTRATED

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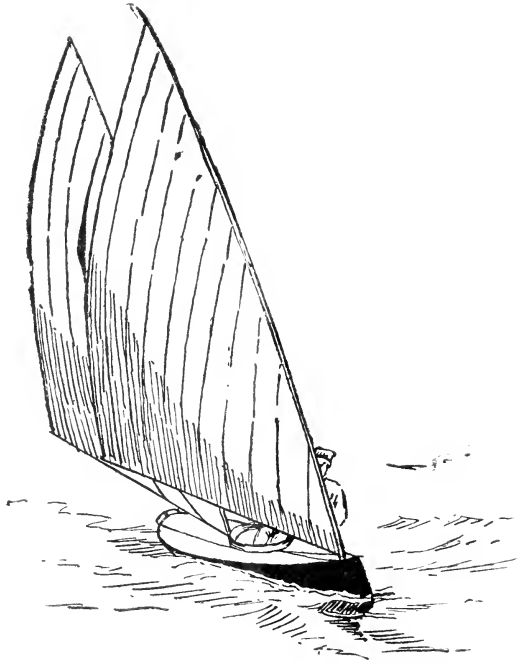


RACING RIG, LEG OF MUTTON STANDING SAILS.

Canoe Scene.

CANOES AND CANOEING.

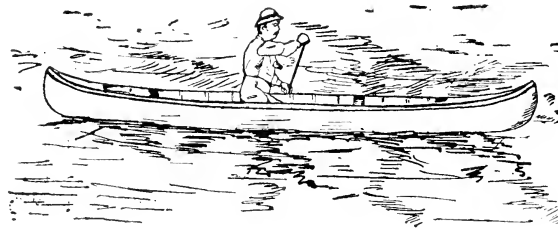
GENERAL SUGGESTIONS.

A CANOE is a boat, sharp at both ends, propelled by a paddle. It may be of bark, a log hollowed out, the skins of animals, thin boards secured to a frame, metal, paper or any other suitable material, built open or decked over.

The size of a canoe depends on the needs of the owner. The smallest canoes are those built to hold one man. A canoe ten feet long and weighing less than ten pounds, has been built and used for cruising. The canoe in the Natural History Museum, New York, from Queen Charlotte's Island, is sixty-three feet long, eight feet three inches wide and five feet deep. It was cut out of a single log. Canoes are now built in length between ten and thirty-five feet.

Many people think only of the birch bark when they hear the word canoe. Birch canoes are in use to-day in the Maine woods, but the light, open, Canadian canoe, built of cedar or basswood, has almost entirely taken its place. The cedar boat is even lighter than the bark canoe, stronger and of better lines, though quite similar to the birch in its form and general appearance and is more easily paddled. Then there is an almost endless variety of decked canoes.

Canoes in Canada carry the sportsman, his provisions and camping outfit to the hunting ground, and the fisherman to the pools and rapids where salmon and trout are taken with the fly. The single blade paddle is used on still water and in running rapids. A pole is often depended on when the canoe has to be forced up stream. The hunting canoes usually hold two men and all their baggage.



Open Canadian Canoe, Single Blade Paddle. Kneeling Position.

Sometimes these boats are built large enough to hold four men or even more. Decked cruising canoes rarely hold more than one and never more than two persons.

A country of lakes, rivers and forests, where there are few if any roads, is inaccessible except by means of the canoe—a boat light enough to be carried on the shoulders of a man over a portage from one watershed to another or around a fall or rapid.

Canoeing and Camping.

There are more people every year who go to the woods to camp out, and many of them go simply for the benefits to be derived from an out-of-door life, without any idea of hunting or fishing. The canoe is one of their chief sources of enjoyment, because in it they can explore rivers and lakes, and take short journeys from camp to attractive points in the neighborhood. The canoe may be the means by which they reach their camp-ground from civilization, and in it they return home,

together with their camping outfit, when the vacation is over. Whole families make such canoeing-camping excursions in Canada yearly, and the ladies enjoy paddling and the camp quite as keenly as do the men.

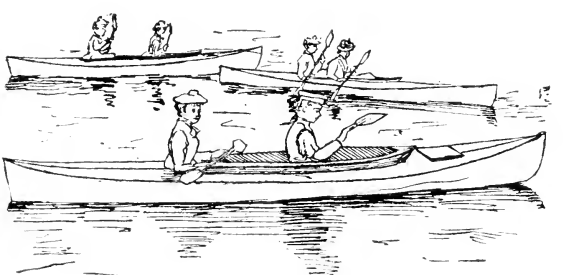
Choice of a Canoe.

What kind of a canoe do I want?

That depends on the water near your house (if you expect to use the canoe there), the kind of canoeing you propose to do and the price you are willing to pay.

Cost.

There are now many canoe builders in the country and a great variety of canoes can be bought in stock ready made. The small, open boats, suitable for smooth water paddling near home, cost from $35 up to $60. The full size Canadian canoes in the States, 16 feet by 30 inches, cost from $60 to



Double Paddling Canoes, Double Blade Paddles. Sitting Position.

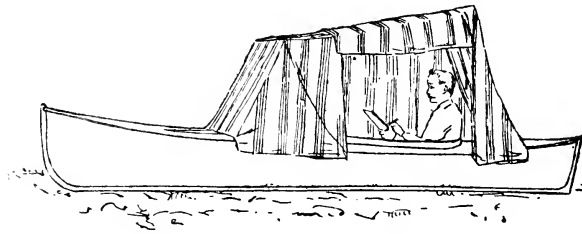
$100. The regular cruising canoes cost from $100 to $150, and the racing, sailing canoes, built to order, cost, fully rigged, from $175 to $250, and then a large part of the rigging must be done by the sailor himself. The big war canoes, as they are called usually purchased by clubs, cost between $200 and $300

The standard canoe is 16 feet long and 30 inches wide, and is intended to carry one man comfortably.

The American Canoe Association rules* do not allow any canoes over 16 feet by 30 inches in the races; and experience has shown that for general canoeing purposes this is the most economical size for one man, take it all in all. Such a canoe is easily paddled and a very fast sailer when properly built and rigged. It is not too large or heavy to be easily handled on shore by two.

Varnish.

Canoes are usually varnished and not painted, and therefore should be kept under shelter when not in use. It is not possible



Cruising Tent for Decked Canoe.

to keep a canoe under cover when not in use on a cruise and therefore care should be taken to cover the deck with a sail or blanket when the canoe is pulled up on shore and left exposed to the sun for any considerable length of time. A coat of good spar varnish should be put on before the cruise is begun, and after it is over the canoe should be rubbed down with sand paper and carefully varnished. A good canoe, properly cared for, will easily last twenty years. There are canoes in use to-day older than that.

Cruising Canoe.

If you intend to cruise on streams and rivers where rapids are

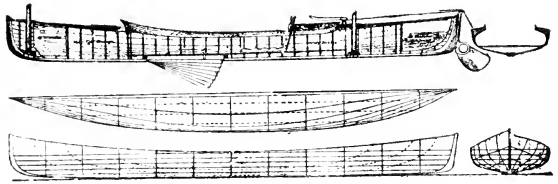
* See Appendix for A. C. A. rules.

met with, the canoe should be built very light, so it can be easily carried by one man through the woods and around dams and falls; and the paddle alone should be depended on—sails are used when the cruise is on open water and portaging is never necessary. A sailing canoe must be built very strong, and is therefore somewhat heavy, with its centreboard, rudder, masts and sails. A sailing canoe is really a small yacht.

Perhaps the best general cruising boat is what is known as Canadian open canoe. It is certainly the best for cruising where portages are frequent, as it is very much lighter (for the load it will carry) than any decked canoe, and may be made quite as safe if "watertights" are built in the ends. It will carry two easily.

Capacity.

A cruising canoe should always be so built that it will hold easily, besides the paddler, provisions for a week, extra clothing,



Decked Cruising Canoe, Folding Centreboard and Drop Rudder.

a camping outfit, including a tent; cooking utensils, blankets and other small necessaries. The cruiser should be ready to cook a meal at any time and also prepared to provide a night's lodging for himself. If he is dependent on hotels for his bed and board he must be prepared to give up the most enjoyable cruising waters.

The cruising canoeman must be a jack-of-all trades if he expects to thoroughly enjoy his trips. He should be an experienced camper, cook and boatman, as well as a good shot and

handy with the rod. If you cannot do all of these things yourself, then arrange to take your first cruise with some one who can.

Other Uses.

Though cruising is by far the most enjoyable form of canoeing, pleasure may be derived from "afternoon" paddling and sailing, short excursions racing, and even from the purely mechanical work of paddling for exercise—and capital exercise it is.

Safety.

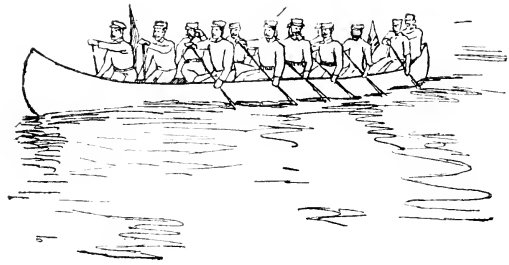
People say, "I don't like boating, it is not safe, many people are drowned every year." Quite true! But did you ever stop to think how many people are killed on railroads and by runaway horses?

A man should never go canoeing, rowing or yachting until he can swim. There is really only one accident to guard against while canoeing—drowning—and with ordinary care the chances of this are very small. Every canoe is a lifeboat, or it should be. Canoeing is not agreeable in cold weather; therefore if one is upset no great harm can result, as the canoe will not only float, but it will keep its crew afloat also, and a ducking in summer is not a serious mishap. A few fatal accidents have happened to canoemen, but almost without exception the unfortunates could not swim or took foolhardy chances.

Testing a Canoe.

It is well to prove a new canoe safe by trying experiments with it near the shore, in order to find out if the air chambers are watertight, and to make sure that you can get in a capsized canoe from the water and bail it out. If the compartments are not watertight, have them made so at once. If you find you cannot get in the canoe after upsetting it, practice till you can. This trick is quite simple when you have acquired the knack. Learn to get in over the side, either side, and over the end; sometimes this is a more convenient way. If this sort of experi-

menting has been tried, the canoeman who is pitched overboard at sometime or other (as all are sure to be sooner or later) will know just what to do and will have confidence in himself, and that is always half the battle. This confidence may be the means of saving another's life. The Canadians have a trick of shaking the water out of a swamped open canoe while swimming alongside, and then the paddler climbs in over the side without upsetting even a very cranky craft. It is a pretty trick and few would believe it possible without seeing it done.



PADDLING.

Position.

PADDLING is good exercise for the arms, wrists, back, and even the legs come in for a share. The paddler may sit, kneel on one knee or on two, or stand while paddling. The standing position is only taken for racing—and rarely even then. The sitting position is the most comfortable, naturally, and the one usually taken for double blade paddling in either decked or open canoes. (See illustrations on pages 6 and 7.) When learning to paddle, it is well to sit very low down in the canoe, as the boat is far less likely to upset.

The greatest power can be obtained when the paddler sits on about a level with the gunwale, but the canoe is usually very cranky then.

Single Blade.

(See cut, page 6.)

The Canadians kneel on a cushion when paddling with the single blade, and half sit on a cross piece under which the feet are put, so that the heels also get a good brace. When two persons paddle an open canoe one sits forward and the other aft, and they paddle on opposite sides, changing from right to left, or left to right when they get tired. It requires considerable skill for one person to paddle a canoe with a single blade

paddle, for then the paddler sits in the middle and paddles on one side only. The canoe is kept from changing its course by a turn of the paddle at the end of the stroke. This turn of the paddle is done by the wrist, and when once acquired it is very easy to keep the canoe on a true course all the time.

Cushions.

Cushions for canoes should be filled with cork shavings. They can then be used as life preservers in case of accident.

Double Blade.

(See cut, page 7.)

The double blade paddle is frequently used in open canoes, and when the paddler takes a kneeling position. A complete stroke then means a dip of the paddle on the right side of the canoe and one on the left. It is entirely unnecessary to describe the motion of paddling—anyone takes to it naturally when seated in a canoe and a paddle is placed in his or her hands. The paddler faces forward and paddling is a perfectly natural motion, quite unlike rowing. The usual position for the double blade paddler to take is on a cushion four or five inches above the bottom of the boat. The feet rest on a stretcher which gives them a good brace. There is a cushioned back rest against which the back and shoulders are comfortably braced, and in this delightfully easy position the work of paddling is done, while the paddler at all times sees where he is going and has ample time to admire the scenery. The muscles across the abdomen are brought into play at every stroke, and the novice will find them very sore if he paddles violently the first few times he tries this new exercise. Writer's cramp in the wrists can be cured by a little paddling exercise daily.

Paddling Fittings.

A paddling canoe needs only a cushion back rest, foot brace and a paddle to make it complete. Add a line at the bow (the

painter) for towing or tieing the canoe and a sponge, and you have all that the most exacting enthusiast could desire.

Varieties of Canoe

Some of the paddling canoes in common use are the very small, light, open or decked canoes between ten or twelve feet long, the Canadian open canoes, and the regular decked canoes of from fourteen to sixteen feet in length.

Still another form of paddling canoe was originated by the Toronto Canoe Club in 1889, and has since become quite a club feature of the sport—the big war canoe as it is called. This is a canoe thirty to thirty-five feet long, holding sixteen paddlers and several passengers besides. The big club canoe is very popular with the ladies, as there is plenty of room in it for them to move about, and they are in no danger of getting their dresses damaged by spray and the drip from the paddles. Then there is a certain sociability about a big party in one boat, that is absent when the same number, perhaps, are in small boats. A race between two or three of these big fellows is a fine sight, the sixteen men in each bending all their strength to the paddles at each stroke, and the several captains shouting orders or encouraging their crews. The war canoe when fully manned and going at racing speed looks, at a little distance, like some great sea monster walking over the water on sixteen legs, as the men and the paddles move in unison and the individuals cannot be distinguished, and when the men are all dressed alike in some appropriate costume the effect is still more striking.

Steering Gear.

Canoes used almost exclusively for paddling are sometimes fitted with a rudder, from the head of which lines run to pedals in the bottom of the canoe against which the feet rest, and by this means a slight movement of one foot or the other steers the canoe, thus relieving the arms of considerable work, especially in rough water. Open canoes are generally round bottomed

and have little or no keel, and are therefore so easily steered by the paddle that a rudder is entirely unnecessary. The rudder is absolutely necessary for sailing, and on a sailing canoe is very convenient even when paddling, especially when a strong wind is blowing which has a constant tendency to drive the bow off the true course.

Paddles.

The single blade paddle should be quite stiff, with very little spring to the blade and handle. A springy blade is known in Canada as a "woman's paddle." The double blade should be about nine feet long, with a joint in the middle, so it can be taken apart and stowed below when not in use. The blades should be comparatively long and not very wide to get the best effect with the least effort. A short, wide blade is apt to get broken or split easily and strains the arms, as it does not give when dipped. A blade should slip through the water a little, especially during the first few strokes, to give the best results.

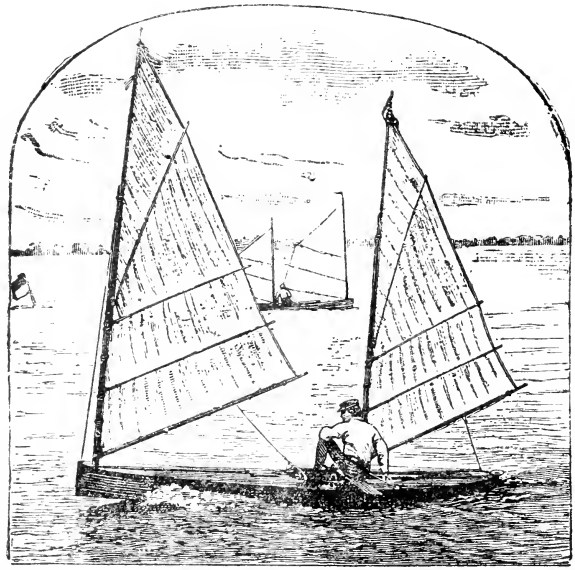
Drip Cup.

The beginner will find that the water from the blades will run down the round of the paddle to the hands. This is caused by raising the paddle at too great an angle at each stroke. The drip can be prevented by putting drip cups on the round of the paddle just above the blade at each end. The best drip cup is made by cutting the nipple off a rubber breast shield and slipping the round of the paddle through the hole thus made. These breast shields can be bought at any drug store. An experienced paddler needs no drip cup to keep his hands dry.

Getting In and Out.

A beginner should be careful when getting in or out of a canoe, for at such times capsizes are most likely to occur. The canoe is very steady and not at all likely to upset when the paddler is sitting down, as his weight is then so placed that the centre of gravity is very low—much more so than in a row boat.

in which the oarsman sits on a seat near the level of the gunwale and far above the water line. But when the paddler stands up, the conditions are reversed, and the narrow beam of the canoe, compared with the ordinary row boat, tells heavily against it in the matter of stability. A little practice in getting afloat



RACING.

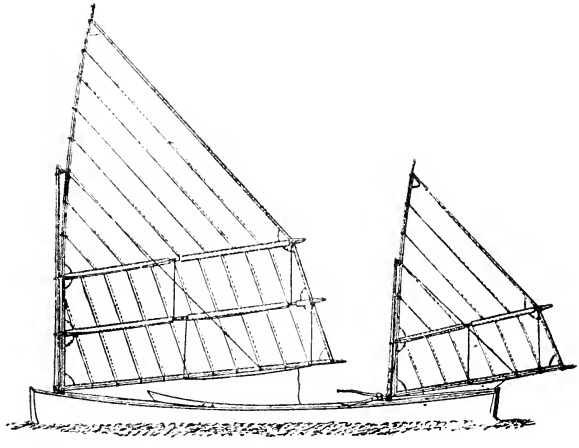
and ashore at the beginning will help the novice to avoid a discouraging upset, which is almost sure to ensue without it.

Feathering.

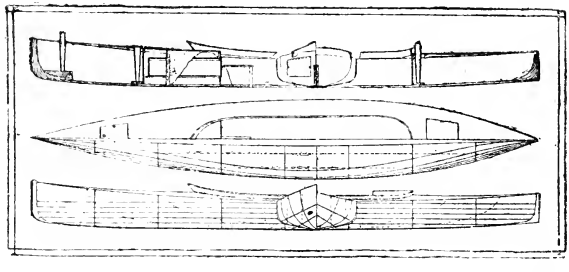
Join the two parts of the paddle with the blades at right angles to each other, so that the blade in the air at each stroke pre-

sents its edge to the wind—"feathers" in other words. A slight turn of the wrist at each stroke accomplishes the result. It will be found far easier to paddle against a breeze when feathering.

The wind you cannot control, and therefore learn to paddle against it with the least friction of paddle, canoe body and mind. It is well to arrange a cruise down stream if you can. Take every advantage of eddies and slack water along shore when paddling up stream or against the tide. Carry a light at night if in navigable waters—it is the law.



Cruising Rig, Hoisting Sails with Battens and Reefing Gear



Sections, Lines, Deck and Sheer Plans of a Decked Racing Canoe

SAILING.

THE sail plays the principal part when canoe cruising is done on open water. A sailing canoe is much more complicated than a paddler. It must have a rudder, a centreboard or keel, besides one or more suits of two sails. The canoeman used to sit on the bottom for sailing, but the deck position has so many advantages that it is now universally taken. (See frontispiece and cut on page 16.) Canoes are sailed exactly in the same way as a larger boat, and the canoe racing rules are almost exactly the same as those for the yacht racing. The paddle is always carried when sailing, to use in case the wind fails.

There is not a prettier thing in the world than a canoe under sail. It is a little butterfly on the water. If you want to see a pretty sight, go to one of the American Canoe Association's annual meets and watch a canoe sailing race, where twenty or more of these little fellows cross a line and sail over a triangular course in sight all the time. Every style of canoe, sail, and rig may be seen along the shore and on the water during the two weeks of the meet, and more can be learned in a half day's study of them than in a year of reading.

The racing men some years ago adopted what is known as the sliding deck seat, which extends over the side of the canoe and on which the captain sits when sailing. It can be shifted from one side to the other when the canoe tacks and is much more comfortable to sit on than the deck, and dryer when sailing in rough water. Considerable skill is required to keep a canoe right side up when sailing, as the harder the wind blows the further out of the canoe must the skipper get to hold it up. Cruisers now use a deck seat, as it adds so much to one's comfort when sailing.

The regular sailing-racing canoes are now decked over entirely,

with the exception of a small hole, called a cockpit, for the feet. This cockpit is boarded in on all sides, so that whatever water gets into it cannot get into the hold of the canoe. An upset in such a canoe does not matter in the least. The skipper climbs out on the windward side and by his weight lifts the sails out of the water and thus rights the canoe. As no water has been able to get into the canoe except the gallon or two in the cockpit, the skipper sails on again as though nothing had happened. No canoeman minds getting his feet wet when sailing.

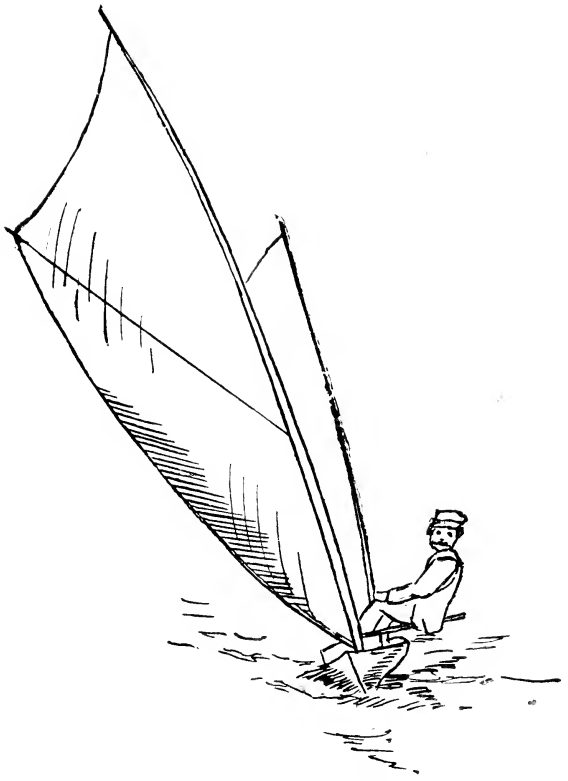
The cockpit in an ordinary cruising canoe should be at least six feet clear between the bulkheads if the captain expects to sleep in it at any time. The deck opening need not be over five feet long and at least half of this can be covered with removable hatches.

The Sailing Canoe.

The paddling canoe is simple—boat, seat and paddling being the essentials. The sailing canoe has, in addition to these, spars, sails, rigging centreboard or keel, rudder or steering gear (perhaps ballast,) and a sliding seat.

The canoe is so small and light a boat that it is necessary the sailor should keep in the middle to trim ship. Thus, it has come about, in order to get an effective rig, that the sail area is divided into two sails, one in front, and the other behind him. A rudder is necessary to control the movement of the canoe at all times.

A boat must have considerable lateral resistance (as it is called, to sail in any direction relative to the course of the wind except straight before it. If a sail is put up in a shallow paddling canoe, and the boat is headed at right angles to the direction of the wind, for instance, it will be found to drift sideways almost as fast as it goes ahead—it makes "leeway," according to the sailor's vernacular. The addition of a straight, deep keel will prevent this and make it possible for the canoe to sail to windward; that is, by a series of tacks—sailing diagonally to the course of the wind—actually to make progress



RACING RIG, STANDING SAIL AND SLIDING SEAT.

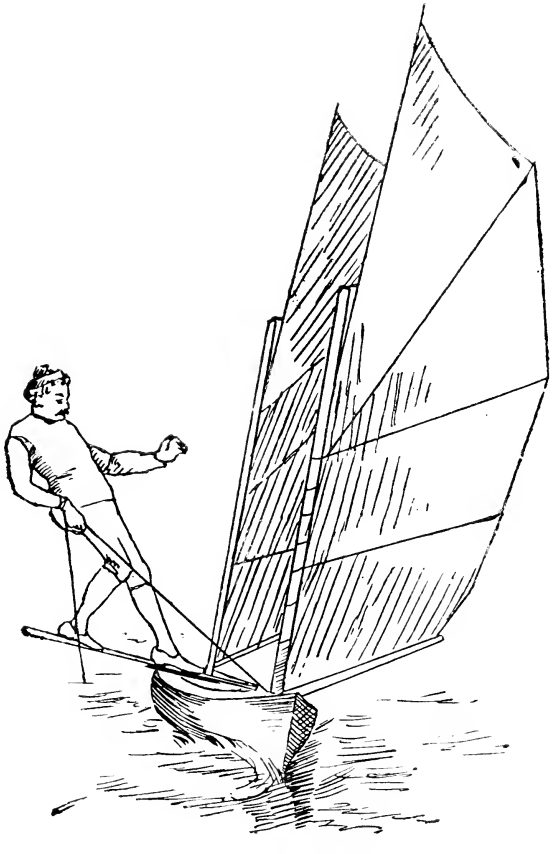
against the wind. There are many disadvantages to the use of a keel. It makes the boat draw more water and, consequently, it cannot be navigated in shallows. The long, straight keel prevents quick turning, and it adds materially to the weight. A hoisting centreboard serves the same purpose and does away with these disadvantages.

The first sailing canoes had only one small sail forward, about an inch of keel along the bottom, and were steered with the paddle, the skipper sitting at the bottom in exactly the same position as when paddling. Gradually the keel was deepened, the sail area increased, a second sail added, and the captain changed his seat to the deck so that his weight would be more effectively exerted against the sail pressure. Then the rudder became a necessity.

The idea of making the canoe a general all-around sailing, paddling, cruising and camping boat was alone recognized for many years, and all improvements in rig were in this line. Therefore, when the centreboard was introduced, it was placed well forward so as not to cramp the open cockpit space which the skipper occupied.

The rig necessary with such a disposition of centreboard, in order to preserve the balance, was a large sail forward and a small sail aft. Some canoes were built with two centreboards, a very small one aft, so that more sail could be carried on the mizzenmast. The modern sailing canoe is the direct result of racing. The canoes that entered the races at the annual American Canoe Association meets, previous to 1888, were all fairly good cruising canoes. Since then, the purely racing machine has come to the front, and the general utility canoe relegated to the rear. Forty-three canoes crossed the finishing line in one sailing race at the meet of 1889. Six was the largest number that completed the course in 1893.

A good sailing canoe can be built and rigged for $150.00. A fully equipped sailing-racing canoe, to compete successfully with the modern flyers, costs considerably over $200.00. Long practice and great skill are required to win a sailing race; but



CANOE GYMNASTICS ON SLIDING SEAT.

anyone who knows even a little about sailing, can very soon learn to manage a moderately rigged cruising canoe and derive great pleasure from the sport. Racing at present is too expensive in time and money for many men to indulge in it.

A few years ago the canoemen were obliged to make their own sails, do their own rigging, and even design and superintend the building of their canoes. The expert racers do this to-day. Now, the best builders supply all the modern improvements, and a fully equipped saling canoe can be purchased ready for the buyer to put in the water, get in himself and sail away.

The Centreboard.

This is a brass plate working in a trunk, hoisted and lowered by a rod or line. The nearer it is placed to the centre of the canoe the better from a purely sailing point of view. It can be so placed without inconveniencing the canoeman, if he gives up all idea of sleeping in his boat. This was thought to be a necessary qualification of any canoe formerly, and very pretty and convenient tents were made to put up at night over the cockpit as a shelter, the canoe, of course, being drawn up on the shore. (See cut on page 8.)

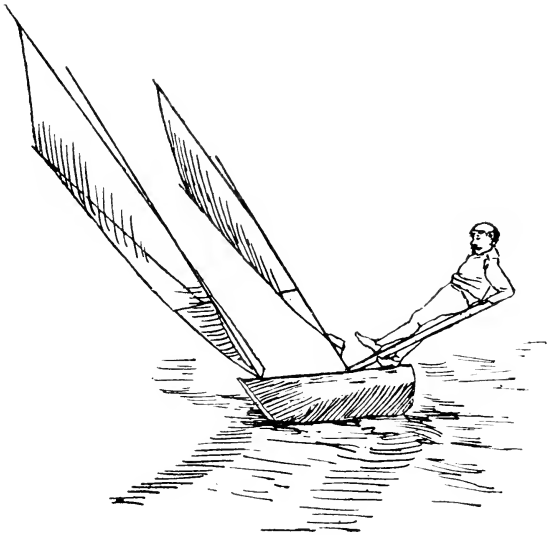
There are two makes of folding boards, fan-shaped, in limited use to-day, which, when hoisted, occupy a small, watertight box in the keel of the canoe and leave the cockpit clear for sleeping room. They are somewhat prone to get out of order and check the speed considerably when lowered, and are, consequently, not popular. (See page 9, Radix Folding-board.) If a small and compact shore tent is carried in the hold of the canoe, all camping requirements are provided without in any way lessening the speed and handiness of the canoe.

The centreboard is dropped when sailing on all points of the wind, except just before it, and may be left down then as ballast without any appreciable loss of speed. It is hauled up when paddling cruising in shallow water, and when the canoe is housed or drawn up on shore. It can even be lifted out of the

trunk and clear of the canoe to lessen the weight to be carried if so desired. (Canoe on page 18 has plate-board.)

The Rudder

The drop rudder is now almost universally used. It is of brass, and the plate that is in the water can be raised when it is down by means of a line leading to the cockpit; when up it



From an instantaneous photograph.

drops of its own weight, if the line is released. The drop rudder, when down, reaches far below the keel, and rarely if ever jumps out of the water when the stern goes up in the air as the canoe rides over a high wave. It is thus always partly in the water at least, and will steer the canoe at any time. It is

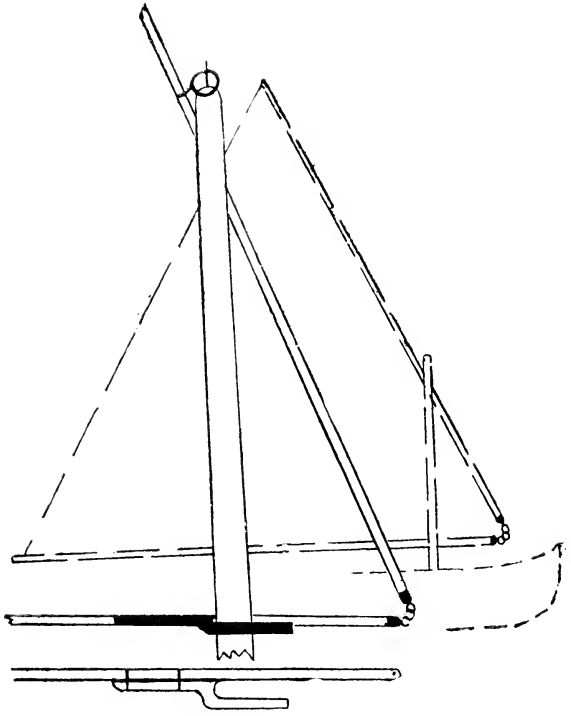
raised up just as the centreboard is when the canoe is run into shallow water or on shore. (See cut on page 9.)

Lines run from the rudder crosshead to a tiller within easy reach of the canoeman's hand. This tiller is a movable stick pivoted on the deck, which can be reached from either side of the canoe on which the skipper happens to be sitting. (See cut on page 18—upper one.) If a sliding deck seat is used, on which the sailor sits well out over the side of the canoe, the tiller is made to slide also, so as always to be within reach. (See frontispiece.)

The sliding seat is a racing device, as is also the athwart ship tiller, but both have been found so comfortable for cruising purposes that they are now generally used on all sailing canoes, but not, of course, made to the extreme racing sizes. The cut of a crack racing canoe on the preceding page shows to what lengths the sliding seat has been carried. A smart squall has just struck the sails and the skipper has gone out to the extreme length of his seat to keep the canoe from capsizing, thus getting his entire body out to the windward of the boat. It requires strength and skill to go to such extremes, as the slightest let up in the force of the wind, without a quick shift of position, would upset the canoe to windward. (See frontispiece, cuts on pages 16, 21 and 23 for sliding seats.)

Sails.

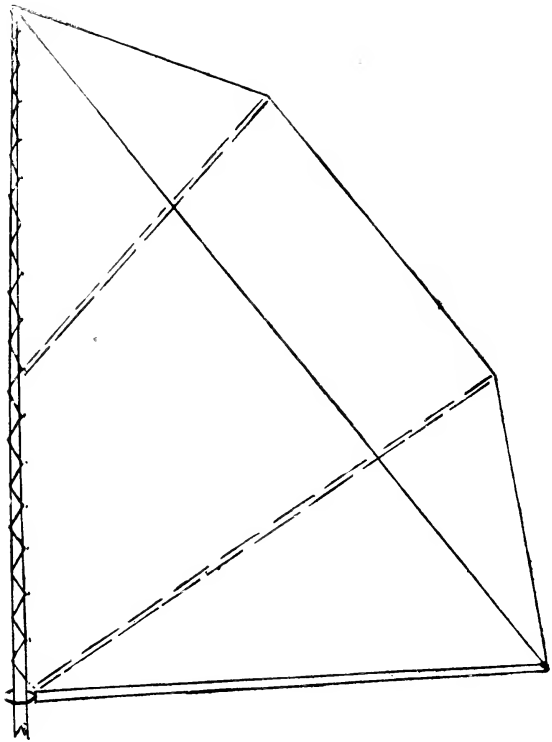
There is probably no form, shape, cut or make of sail that has not at some time been tried on a canoe. The sails and rig must be very simple, as one man has to handle them and at the same time balance and manage the canoe. The lateen is a simple sail, and for this reason was very popular and largely used a few years ago. The sail is triangular, with sticks (spars) on two sides linked together at the angle—boom and yard. A short mast with a pin in the top completes the spars. A ring is lashed to the yard which fits over the pin in the mast, and a jaw on the boom, which fits the mast and holds the boom in place. A line attached near the end of the boom, called the sheet,



LATEEN SAIL AND SPARS.

completes the outfit. The canoeman trims the sail with the sheet and the sail is bodily lifted off the mast when it is to be taken down. When two sails are used, the sheet of the mizzen (which is behind the skipper) leads to a block or ring on deck at the stern, and from it to a cleat within easy reach of the skipper's hand amidship. (See cut on page 25.)

The standing sail is better than the lateen in several ways,



STANDING SAIL.

The triangular sail is a leg of mutton with only two spars, boom and mast The five-sided sail has mast, boom and two battens. Both sails have only one rope—the sheet.

and even simpler. It has only mast, boom and sheet. The cloth of the sail is sewed or laced to the spars. The boom can be folded up against the mast, and the sail wrapped around it. It can be set or furled by simply unrolling it and standing the mast up in the mast tube in the canoe, or lifting it out and rolling it up. The size of the sail can be greatly increased without lengthening either mast or boom, by the use of battens slipped in pockets made in the sail, as shown in the diagram.

Racing canoes have many standing sails of different sizes, suitable for light, moderate or heavy weather, and the suit best suited to the day is used in a race, the others, of course, being left on the shore. The large light weather rigs spread nearly two hundred square feet of sail, and the heavy weather rig is rarely under seventy-five feet The latter area is ample for a cruising canoe, and it will often occur on a cruise that fifteen or twenty square feet will be found quite sufficient for speed and comfort.

There are those who prefer a hoisting and lowering rig to either lateen or standing sails and use it for both cruising and racing. There is much to be said in favor of the standing sail, especially on account of its simplicity, but for those who are not afraid of a little trouble, the hoisting rig is much more satisfactory It can be hoisted, lowered and reefed by the skipper while afloat, and consequently is far better for cruising or long-distance sailing than the standing sail. Small blocks, strong line and neat fittings can now be purchased, and several sail-makers cut and sew very fine sails for canoes. A hoisting sail is "yachty" and far more scientific than any other, but it needs a "sailor man" to make and handle it well.

Battens in canoe sails have been used for many years, and the yachts have lately borrowed this idea for keeping parts of their sail areas perfectly flat.

There have been innumerable reefing gears invented and used on hoisting sails by which they can be quickly and simply reefed by the captain without moving from his seat. Canoe men rarely if ever reef in races now; the races are not long

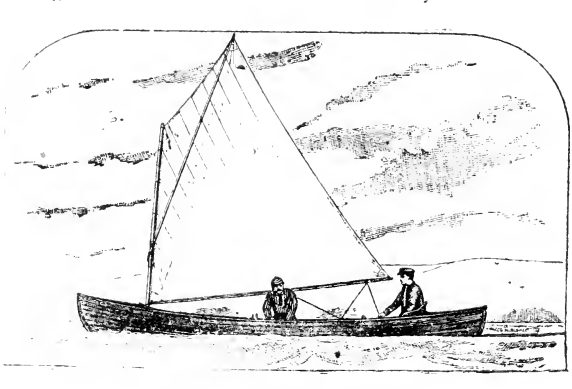
enough in point of time to make it necessary (as violent changes of wind rarely occur), but for cruising or pleasure sailing for all day a reefable sail is absolutely necessary.

Canoe sailors often take to larger boats, and of late years their ideas in models, rigs, sails and fittings have materially affected small yachts and skiffs to greatly improve them.

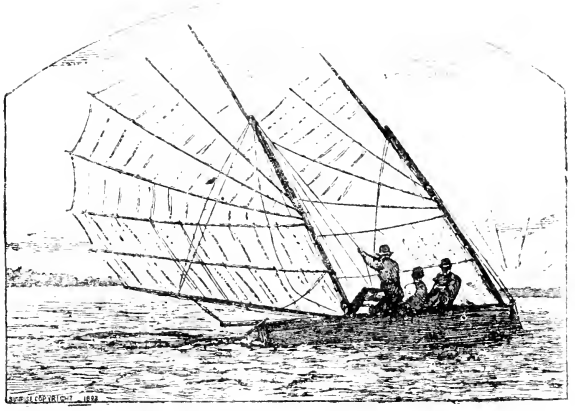
The St. Lawrence skiff is nothing more nor less than a large canoe, and would be called a canoe if it was not propelled by oars so frequently. A sailing skiff is a canoe in every sense of the word and the racing skiffs on the St. Lawrence have adopted all the canoeing devices (except the sliding seat)—plate, centreboard, drop-rudder, two batten sails, watertight bulkheads —and they are sailed in exactly the same way except that from four to six men compose the crew instead of one man. The crew all sit to windward when tacking, and lean far out during the heavy puffs.

The single-hand cruisers, so called, are also often owned, designed and rigged by ex-canoemen. The best type of such boats thus far produced ("Scarecrow" and "La Gloria" models) are solely the work of canoemen.

A larger boat than a canoe is demanded by those who want

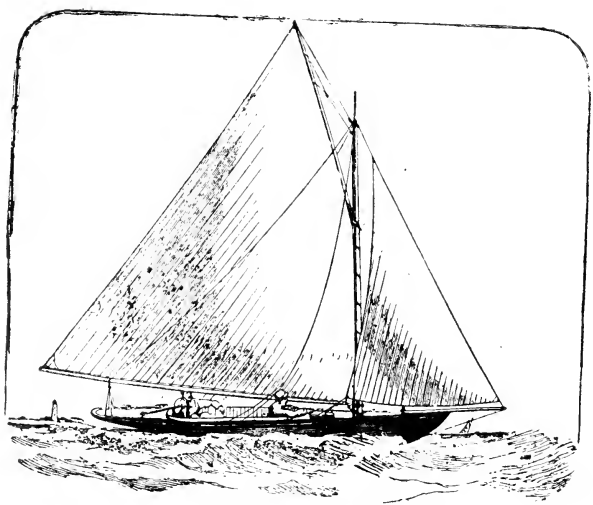


St. Lawrence River Skiff, Spreet Sail.



St. Lawrence River Racing Skiff

companionship when sailing, and by those also who live near and enjoy the sport on large bodies of water, where the waves are at times too heavy for comfort in so small a craft as a sixteen-footer, only thirty inches wide. Be it in canoe, skiff or single-hander, if you are fond of the water and need recreation, my advice is, "get afloat," and "learn to swim." Perhaps the order should be reversed.



SINGLE HANDER, "SCARECROW."

RACING REGULATIONS.

RULE I.—A canoe, to compete in any race of the A. C. A., must be sharp at both ends, with no counter stern or transom, and capable of being efficiently paddled by one man, and must come within the prescribed limits, as follows. Maximum length, 16 feet, and for that length a maximum beam of 30 inches. Minimum beam, 28 inches. Beam may be increased ⅛ inch for each full inch of length decreased. No canoe shall have a draft of more than 10 inches, except the unclassified boats, to which class the limits of length and breadth only shall apply.

In centreboard canoes, the keel outside of the garboard shall not exceed 1¼ inches in depth, including a metal keel band of not over ¼ inch deep. The centreboard must not drop more than 18 inches below the garboard, and when hauled up must not project below the keel. Canoes without centreboard may carry keels not over 3 inches deep below garboard, and not weighing more than 36 pounds. Leeboards may be carried by canoes not having centreboards.

Measurements—The length shall be taken between perpendiculars at the foreside of stem and the aft side of stern. The beam shall be taken at the widest part, not including the beading, which shall not exceed 1½ inches in depth. If deeper, it shall be included in the beam. The word "beam" shall mean the breadth formed by the fair lines of the boat, and the beam at and near the water line shall bear a reasonable proportion to the beam at the gunwale.

The "cruising canoe" shall be one which conforms to the above conditions, and, in addition, has a well not less than 16 inches wide for a length of 3 feet 6 inches, with a sleeping space of 6 feet, of which at least 5 feet shall be clear.

The centreboard, when housed, shall not project below the keel or above the coaming. The sliding seat shall not be longer than the beam of the boat, and no standing sail shall be

used. The Regatta Committee may rule out any canoe which, in their opinion, does not conform to the spirit of these regulations.

The foregoing rules of measurement shall not be interpreted to disqualify any canoe built prior to January 1st, 1890, which conforms to the rules prior to that date.

RULE II.—None but members of the American Canoe Association, unless upon the invitation of the Regatta Committee, shall be permitted to enter its races and no canoe shall enter that is not enrolled on the Secretary's books, and no member who is in arrears to the Association shall compete in any race or claim any prize while such arrears remain unpaid.

No canoe shall be entered at any one meet by more than one man. The "crew" of each canoe shall consist of one man only, unless the programme of the Regatta states the contrary. Members must paddle or sail their own canoes.

A canoe which is not owned or used for racing by any other member present, shall be deemed to be the canoe of the member bringing it to camp. In double canoe races, the owner may associate any other member with himself.

RULE III.—All entries must be in writing, on the blanks provided, and must be handed in to the Regatta Committee within such time as they may direct.

RULE IV.—Every canoe entering, except for an upset race must have her entry number conspicuously placed on canoe or man when paddling, and on both sides of mainsail while sailing. The clerk of the course shall provide each man, when he makes his entry with three prints of his number on cloth.

RULE V.—Flags shall be given as prizes as follows: A first prize in each race, and a second in each regular event when more than two finish.

The winners of the Paddling Trophy, the Sailing Trophy and the first record man shall be given large practical bunting flags, with the year and race plainly marked thereon, and the five best flags at the disposal of the Regatta Committee shall be given to the first five record men. Prizes donated for special races or

competitions may be accepted at the discretion of the Regatta Committee. No prizes of money shall be raced for.

Races.—There shall be three record races: No. 1, paddling and sailing combined; No 2 paddling; No. 3, sailing. To obtain a place on the record, a contestant must enter and finish in all three record races. None but men who have entered for the record will be allowed to enter in any record races. Only such contestants as finish in all three races will receive a credit number according to position, relative to each other in each race—the highest number given in each race being equal to the number of the contestants, and the next one less, and so on, the three numbers given added together give the credit amount of the record.

In the record races each contestant shall use but one canoe and one sailing rig, which shall be a practical hoisting and lowering rig

In case of unavoidable accident which prevents a man from finishing in any one race, the Regatta Committee may, at its discretion, permit such canoe to enter the other two races, and her marks to be counted for the record, but he shall receive zero for the race which he does not finish.

The contestants obtaining the highest aggregation of points becomes the leading honor man for the year. There shall be a race for the paddling trophy. The total number of contestants shall be unlimited. There shall be a race for the A. C. A. sailing trophy. Conditions as follows: Sailing canoe, A C. A. rules, no limit to rig or ballast; time limit, 3½ hours; distance, 9 miles Accredited representatives of foreign clubs, not exceeding five in number, shall be eligible. In case of more than five foreign entries, the first five received shall be eligible to start. The total number of starters shall not exceed fifteen and the ten or more vacancies (after deducting the foreign entries) shall be selected from competitors in the special "Unlimited Race" as follows. The Regatta Committee shall nominate two and the balance (after deducting foreign entries) shall be taken from the leading men at the finish in their order.

RULE VI.—The mode of turning stakeboats, and all direc-

tions for each race shall be announced in the programme of the Regatta Committee or posted on the bulletin board one hour before the race is called; and any competitor not knowing the course, or mistaking it, or not following these rules, does so at his own risk. Stakeboats and buoys will be left on the port hand, when not stated distinctly to the contrary. The committee shall have the power to change the direction of the race at any time before the first signal and shall indicate the same by flags, according to Rule XIII. The start and finish in all races shall be by the bow.

RULE VII.—No pilotage or direction from any boat or from the shore will be allowed, and anyone accepting such assistance may be disqualified.

RULE VIII.—A canoe touching a buoy or other canoe, unless wrongfully compelled to do so by another canoe, shall be disqualified. In case of a foul, the non-fouling canoe must go over the course, unless disabled beyond the possibility of temporary repair, in order to claim the race. Every canoe must stand by its own accidents. If a canoe, in consequence of the violation of any of the Rules, shall foul another canoe, or compel another canoe to foul any canoe, buoy or obstruction, or to run aground, she shall be disqualified.

RULE IX.—Should the owner of any canoe, duly entered for a race, consider that he has fair ground of complaint against another, he must give notice of same, before leaving his boat on the finish of the race, to the Regatta Committee, and must present the same in writing within one hour.

The sum of one dollar shall be deposited with each protest, to be forfeited to the Association should the protest not be sustained. The Regatta Committee shall, after hearing such evidence as they may deem necessary, decide to protest, and the decision if unanimous, shall be final; but in case it is not unanimous, an appeal may be made to the Executive Committee, when a dollar must be filed, and the Commodore shall call a meeting of the Executive Committee at once to hear and determine the matter, whose decision shall be final.

No member of either committee shall take part in the decision of any question in which he is interested. In all cases where a protest is lodged on the ground of fouling, evidence of actual contact shall be necessary to substantiate the protest. The Regatta Committee shall, without protest, disqualify any canoe which, to their knowledge, has committed a breach of the Rules.

Paddling Races.

RULE X.—Paddling races shall be started by the starter asking, "Are you ready?" On receiving no answer he shall say "Go." If he considers the start unfair, he may recall the boats, and any canoe refusing to start again shall be distanced.

The combined paddling and sailing race shall be started in the same manner the word "Go" being immediately followed by a gun.

RULE XI.—A canoe's own water is the straight course from the station assigned it at starting. Any canoe leaving its own water shall do so at its peril; but if the stern of one canoe is a canoe's length ahead of the bow of another, the former may take the water of the latter, which then becomes its own water and it shall only leave it at its peril.

Sailing Races.

RULE XII.—The paddle shall not be used in sailing races except for steering when the rudder is disabled, or shoving off when aground afoul of anything, or in extreme danger, as from a passing steamer or from a squall.

RULE XIII.—Five minutes before the start a signal will be given and a blue flag hoisted, and four minutes later a second signal will be given and a yellow flag hoisted, and one minute later a third signal will be give to start and an A. C. A. flag hoisted and left up.

Any canoe which crosses the course side of the starting line prior to the third signal must return above the line and recross it, keeping out of the way of all competing canoes using the paddle if necessary, but after the third signal the start shall be

considered as made, and all canoes on either side of the line shall be amenable to the Sailing Rules. Canoes may take any position for starting, and prior to the third signal, may be sailed and worked in any manner (outside aid not allowed). A green flag displayed signifies that buoys are to be left to starboard, a red flag means to port. The Regatta Committee may vary the manner of starting at their discretion, but all sailing races should be started to windward when practicable, and under a time limit.

RULE XIV.—All shiftable ballast, except centreboards shall be carried within the canoe and no fixed ballast shall be carried below the keelband. Ballast may be shifted, but no ballast shall be taken in or thrown out during a race.

RULE XV.—A canoe overtaking another shall keep out of the way of the latter but when rounding any buoy or vessel used to mark out the course, if two canoes are not clear of each other when the leading canoe is close to and is altering her helm to round the mark, the outside canoe must give the other room to pass clear of the mark whichever canoe is in danger of fouling. No canoe shall be considered clear of another unless so much ahead as to give free choice to the other on which side she will pass. An overtaking canoe shall not, however, be justified in attempting to establish an overlap and thus force a passage between the leading canoe and the mark after the latter has altered her helm for rounding.

RULE XVI.—Canoes close-hauled on the port tack shall give way to those on the starboard tack. In the event of a collision being imminent, owing to the canoe on the port tack not giving way, the canoe on the starboard tack shall luff and go about but shall never bear away. A canoe on the port tack compelling a canoe on the starboard tack thus to give way forfeits all claim to the prize.

RULE XVII.—Canoes going free shall always give way to those close-hauled on either tack.

RULE XVIII.—When canoes close-hauled are approaching a shore, buoy or other obstruction, and are so close that the

leewardmost cannot tack clear of the canoe to the windward of her, and by standing on would be in danger of fouling the obstruction the canoe to windward shall on being requested, go about, and the canoe requesting her to do so shall also tack at once

RULE XIX.—Should two or more canoes be approaching a weather shore or any obstruction and be so close to each other that the weathermost one cannot bear away clear of the one to the leeward of her, and by standing on would be in danger of running aground or of fouling the obstruction, then the canoe that is to leeward shall, on being requested, at once bear away until sufficient room is allowed for the weathermost canoe to clear the obstruction.

RULE XX.—A canoe may luff as she pleases, in order to prevent another from passing her to windward, provided she begins to luff before an overlap has been established. An overlap is established when an overtaking canoe has no longer a free choice on which side she will pass, and continues to exist as long as the leeward canoe by luffing or the weather canoe by bearing away, is in danger of fouling. A canoe must never bear away out of her course to prevent the other passing to leeward; the lee side to be considered that on which the leading canoe of the two carries her mainboom. The overtaking canoe, if to leeward must not luff until she has drawn clear ahead of the canoe she has overtaken.

RULE XXI.—A canoe may anchor during a race, provided the anchor is attached or weighed on board the canoe during the remainder of the race. A canoe shall not be propelled by rocking or fanning.

RULE XXII.—A change in these rules desired by any member of the Association shall be presented by the Regatta Committee, with their approval or disapproval, to the Executive Committee for final action; notice of such change having been given in the official organs at least two weeks before the vote of the Executive Committee is taken thereon.

RULE XXIII.—In case of temporary vacancies in the Regatta Committee, the other members shall appoint substitutes.

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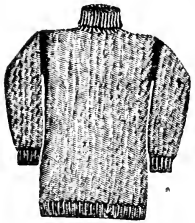

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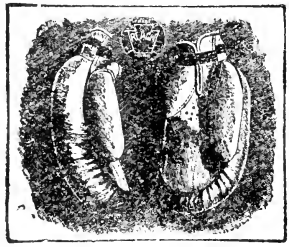

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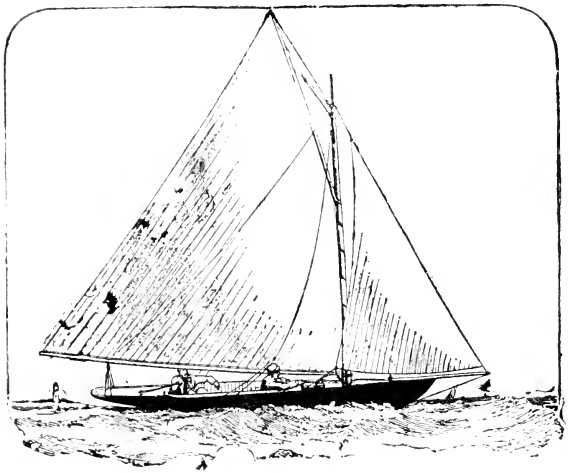

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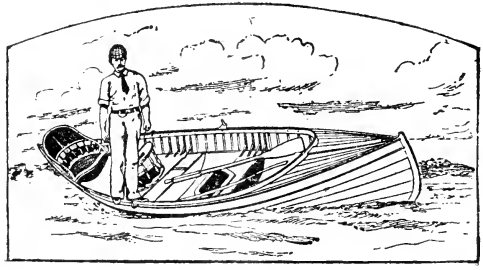

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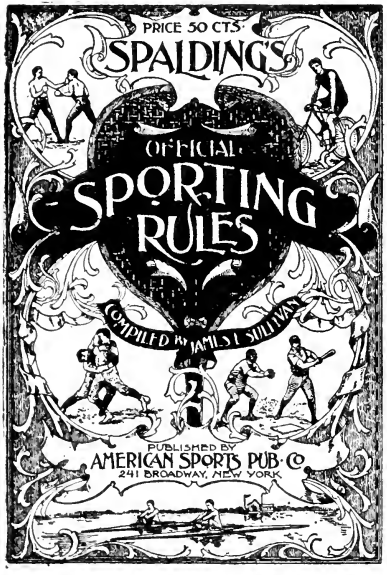

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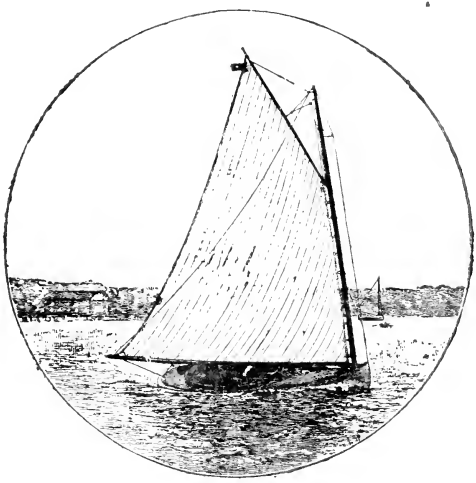

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